

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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> Martin Suuberg Commissioner

May 2, 2017

Dean Chapman Garelick Farms, Inc. 1199 West Central Street Franklin, MA 02038 **RE:** Franklin

Transmittal No.: X271638 Application No.: CE-16-017

Class: *SM80-7*

FMF No.: 130850

AIR QUALITY PLAN APPROVAL

Dear Mr. Chapman:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns adding videojet printers and a biogas flare and consolidating plan approvals at your beverage manufacturing facility located at 1199 West Central Street in Franklin, Massachusetts ("Facility"). The Application bears the seal and signature of Paul G. Richard, Massachusetts Registered Professional Engineer Number 45899.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

A. HISTORY AND DESCRIPTION OF OPERATIONS

The Facility is located at 1199 West Central Street in Franklin, Massachusetts. The facility is a fluid milk and other beverage processing and packaging plant (SIC Code 2026, NAICS Code 311511).

The Facility operates two (2) primary dual-fuel boilers with energy input capacities of 16.75 and 20.925 million British thermal units per hour (MMBtu/hr). These two boilers are designated Emission Units (EU) 1 and 2. The Facility operates one (1) secondary natural gas fired boiler located at their wastewater treatment building with a heat input capacity of 3.033 MMBtu/hr. The primary facility boilers were originally approved for operation by the MassDEP under Approval No. 4B90165, and most recently approved for a burner upgrade under Transmittal No. X235453. The secondary boiler was installed in 2015 and is permit exempt in accordance with 310 CMR 7.02(2)(b)(15)(a), and therefore not given an emission unit number.

As part of its wastewater treatment system, the Facility operates an anaerobic digester-gas recovery operation to generate and recover biogas, which is directed to 5 (five) Capstone combined heat and power (CHP) microturbines. These units are designated EU3 through 7. The biogas varies in methane content, and for the purpose of this application, it was assumed to contain 68% methane. The microturbines combust the biogas to generate electricity to the facility and also to generate hot water to heat the water treated in the anaerobic reactor. Each unit is rated at 842,000 Btu per hour and 65 kilowatts. These units were originally approved by the MassDEP in 2009 under Transmittal No. X228429, and after a temporary shutdown (2012-2015), the units were reactivated in 2015 in accordance with 310 CMR 7.02(3)(m). In accordance with the Plan Approval, one out the five units was stack tested for NOx and CO in 2010 and also 2015, and the results showed compliance with the approved emission limits.

A biogas flare also operates continuously as part of the digester-gas recovery system to combust biogas in excess of what is burned in the Capstone units. The biogas flare was installed in 1999 at the time the Facility anaerobic wastewater treatment system was built and has operated since then. It is rated at 8,400,000 British Thermal Units (Btu) per hour and is designated as EU8. The flare has a design residence time of 0.8 seconds at 1600° F.

As part of its milk packaging lines, the Facility operates a small scale digital printing operation which utilizes fourteen VideoJet Coders rotating among ten print stations to print facility information and "Use By" dates directly onto the beverage containers.

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B. PROJECT DESCRIPTION

On August 17, 2016, MassDEP received the present application Transmittal No. X271638. This application is for formally approving the existing waste biogas flare (EU8) and existing Video-Jet printers (EU9), and for consolidating all of the above mentioned Plan Approvals into one single Plan Approval.

The fourteen Video-Jet printers rotating between ten printing stations are used to print information on beverage bottles (expiration dates, etc.). The printers were installed over a period of several years beginning in 1990 and were individually below the permit threshold of 1 ton per year of an air contaminant. The ten printers collectively have a potential emission rate of volatile organic compounds (VOC) over 1 ton per year. The VOC and hazardous air pollutants (HAP) contained in the ink and makeup fluid solvent evaporate as fugitive emissions inside the Facility. The VOC consists of compounds such as methyl ethyl ketone, and the HAP consists of compounds such as methanol. The printers are not subject to the 310 CMR 7.18(21) "Surface Coating of Plastic Parts" requirements, because they do not have the potential to emit more than 50 tons per year of VOC. These printers are collectively designated as EU9.

The original Plan Approval No. 4B90165 for EU1 and 2 boilers limited nitrogen dioxide (NO_2) from the boilers to 15.7 and 19.7 tons per year, respectively, and sulfur dioxide (SO_2) to 13.5 and 16.9 tons per year, respectively. In this Plan Approval Transmittal No. X271638, the air contaminant nitrogen dioxide is replaced with nitrogen oxides (NO_x), and the limits are restated as 15.7 and 19.7 tons per year of NO_x . To meet those NO_x limits, both boilers have yearly restrictions on fuel oil burning. Since the currently allowable fuel oil sulfur content in #2 fuel oil is 0.05%, much lower than was initially approved for #6 fuel oil (0.5%), the previous sulfur dioxide (SO_2) emission limits are superseded in this Plan Approval. In addition, for all air contaminants, the present application uses the manufacturer's boiler emission factors, which MassDEP considers more accurate than the AP-42 emission factors that were used in the burner replacement application Transmittal No. X228429.

The previously approved EU3 through 7 Capstone turbine emission limits are unchanged in this Plan Approval.

This Application also lists all the different air emission sources that are exempt from Plan Approval requirements including on-site emergency generators, space heaters, and blowmolding machines. This Plan Approval sets a Facility-wide cap on potential emissions from all emission sources, both exempt and non-exempt. The Facility-wide emission limits are listed in Table 2 below.

This Plan Approval Transmittal No. X271638 supersedes Plan Approval No. 4B90165, Plan Approval Transmittal No. X228429, and Plan Approval Transmittal No. X235453. The underlying plan application materials for the previous Plan Approvals remain applicable where not superseded by this Plan Approval Transmittal No. X271638.

C. APPLICABLE REGULATORY REQUIREMENTS

1. State Requirements

A. Best Available Control Technology (BACT)

This project is subject to the 310 CMR 7.02(8) requirement for Best Available Control Technology (BACT) for the biogas flare and Video-Jet printers, EU8 and 9. MassDEP has determined the following:

- 1. BACT for the flare is represented by good combustion practices to ensure high destruction efficiency of the waste biogas.
- 2. BACT for the Video-Jet printers is represented by a combination of best management practices, pollution prevention and a limitation on hours of operation. Food and Drug Administration (FDA) mandates a 4 hour packaging line downtime cleaning cycle for every 24 hour operating period. The Permittee elects to utilize this schedule as an operational limitation for the VideoJet Printers, which results in a 7,300 hour per year limit on each unit.

B. Fuel Oil Sulfur Limits

The two large boilers EU1 and 2 have the ability to burn #2 fuel oil and are therefore subject to 310 CMR 7.05 Table 1: "Sulfur Content Limit of Liquid Fossil Fuel". The Permittee has not burned oil in these boilers since 2010. There is a remaining stock of boiler fuel oil, which is approximately 6,100 gallons of fuel oil in two onsite tanks. This remaining stock of oil has an estimated sulfur content of 0.19%; which is higher than the current limit of 0.05%. Pursuant to 310 CMR 7.05(1)(b)2., that oil may be burned, but any new deliveries of oil must meet the current and future limits (0.05% sulfur today, and 0.0015% sulfur on and after July 1, 2018).

2. <u>Federal Requirements</u>

The Permittee has indicated that the boilers (EU1 and 2) are subject to 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart JJJJJJ, and the existing Cummins emergency generator engine is subject to 40 CFR 63 Subpart ZZZZ. Since MassDEP has not accepted delegation for these Subparts for sources which are not subject to 310 CMR Appendix C, the Permittee is advised to consult with EPA Region 1 at 5 Post Office Square, Suite 100, Boston, MA 02109-3912, telephone: (617)918-1111. Other applicable requirements may include notification, record keeping, and reporting requirements.

2. <u>EMISSION UNIT IDENTIFICATION</u>

Each Emission Unit ("EU") identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1				
EU	Description	Design Capacity	Pollution Control Device (PCD)	
1	Dual Fuel (Natural Gas and #2 Fuel Oil) Cleaver Brooks Boiler Model No. CB-400-400	16.750 MMBtu/hr	None	
2	Dual Fuel (Natural Gas and #2 Fuel Oil) Cleaver Brooks Boiler Model No. CB-400-500	20.925 MMBtu/hr	None	
3-7	(5) Capstone Microturbines Model No. C65 ICHP	0.842 MMBtu/hr per unit 65 kilowatts per unit	None	
8	NAO, Inc. Flare Model No. 50385	8.4 MMBtu/hr	None	
9	(10) VideoJet Printers (Note 1) Model No. Excel 170i	2.4 fluid ounces per hour per unit	None	

Table 1 Key:

EU = Emission Unit Number PCD = Pollution Control Device

MMBtu/hr = Million British Thermal Units per hour Btu/scf = British Thermal Units per cubic foot

Table 1 Notes:

Note 1: Fourteen (14) identical VideoJet units are rotated in- and out-of-service at ten (10) coding locations along various milk packaging lines.

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2					
EU	Operational / Production Limit	Air Contaminant	Emission Limit		
1 and 2	EU1 and 2 Boiler Limits		Oil Firing lb/MMBtu	Gas Firing lb/MMBtu	Tons per Year (Note 2)
1	1. 718,100 gallons No. 2	PM	0.025	0.01	1.57
	fuel oil per consecutive 12-month period	NOx	0.25	0.12	15.70
	2. Fuel oil sulfur content	СО	0.07	0.15	11.00
	≤0.05% by weight (Note 1)	VOC	0.025	0.016	1.57
		SO_2	0.052	0.001	3.27
2	3. 1,125,700 gallons No. 2	PM	0.025	0.01	1.97
	fuel oil per consecutive 12-month period	NOx	0.25	0.12	19.7
	4. Fuel oil sulfur content	СО	0.07	0.15	13.75
	≤0.05% by weight (Note 1)	VOC	0.025	0.016	1.97
	,	SO_2	0.052	0.001	4.10
3-7 (Notes 3	5. Burns biogas only	NOx	0.036 lb/MMBtu, 0.46 lb/MWh, 0.03 lb/hr, 0.13 tpy		
& 4)		СО	0.31 lb/MMBtu, 0.46 lb/MWh, 0.26 lb/hr, 1.14 tpy		
		VOC	0.008 lb/MMBtu, 0.10 lb/MWh, 0.007 lb/hr, 0.028 tpy		
		PM/PM ₁₀ /PM _{2.5}	0.012 lb/MM lb/hr, 0.044 tp	Btu, 0.16 lb/MV py	Vh, 0.010
		SO ₂	0.049 lb/MMBtu, 0.63 lb/MWh, 0.041 lb/hr, 0.18 tpy		
		Opacity		≤5%, except 5% to ≤10% for ≤2 minutes during any one hour	
		Smoke	310 CMR 7.06(1)(a)		
8	6. Burns biogas only	PM	0.14 lb/hr, 0.6 tpy		
		NOx	0.57 lb/hr, 2.5 tpy		
		СО	3.11 lb/hr, 13.6 tpy		
		VOC	1.18 lb/hr, 5.1tpy Designed to meet 98% VOC destruction efficiency		destruction
		SO ₂	0.42 lb/hr, 1.8 tpy		

Table 2				
EU	Operational / Production Limit	Air Contaminant	Emission Limit	
8		Opacity	≤5%, except 5% to ≤10% for ≤2 minutes during any one hour	
		Smoke	310 CMR 7.06(1)(a)	
9	 7. 7,300 hours per year per unit (Note 5) 8. ≤ 69% by weight ink VOC content limit 9. ≤ 35% by weight ink HAP content limit 10. ≤ 99% by weight makeup fluid VOC content limit 11. ≤ 50% by weight makeup fluid HAP content limit 	HAP (total)	1.23 lb/hr, 4.45 tpy 0.62 lb/hr, 2.26 tpy	
Facility-		PM	5.4 tpy	
Wide		NOx	47.1 tpy	
(Note 6)		СО	46.7 tpy	
		VOC	14.5 tpy	
		SO ₂	12.1 tpy	
		HAP (total)	2.3 tpy	

Table 2 Key:

EU = Emission Unit Number $NO_x = Nitrogen Oxides$ CO = Carbon Monoxide

PM = Total Particulate Matter, condensable and noncondensable microns in diameter

 $PM_{2.5}$ = Particulate Matter less than or equal to 2.5

microns in diameter

HAP (total) = total Hazardous Air Pollutants tpy = tons per consecutive 12-month period

 \leq = less than or equal to

% = percent

 $SO_2 = Sulfur Dioxide$

 PM_{10} = Particulate Matter less than or equal to 10

VOC = Volatile Organic Compounds

lb/MMBtu = pounds per million British Thermal Units

lb/MWh = pounds per megawatt hour

lb/hr = pounds per hour

Table 2 Notes

1. Pursuant to 310 CMR 7.05, the fuel oil sulfur limit is current through June 30, 2018 and after that date will be reduced to 0.0015% sulfur by weight.

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- 2. The EU1 and 2 tons per year limits are calculated based on the boilers firing fuel oil up to the yearly limits, with the exception of CO, which is based on the boilers firing unrestricted natural gas for a year.
- 3. Emission limits are per turbine.
- 4. lb/MMBtu and lb/MWh emission limits apply on to microturbine loads of 75% or greater and shall be determined based on one-hour averages.
- 5. Food and Drug Administration (FDA) mandates a 4 hour packaging line downtime cleaning cycle for every 24 hour operating period. The Permittee elects to utilize this schedule as an operational limitation for the VideoJet Printers, hence the 7,300 hour per year limit on each unit.
- 6. Facility-wide emission limits include emissions from EU 1 through 9 and minor emissions from insignificant and exempt sources listed in the Application.

B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

	Table 3				
EU	Monitoring and Testing Requirements				
1 and 2	1. The Permittee shall monitor fuel oil purchases such that only fuel oil with a sulfur content complying with 310 CMR 7.05 is purchased for use in each unit. The Permittee may use documentation from the supplier that the fuel oil meets the sulfur content limit and shall perform additional oil sulfur analysis if requested by MassDEP.				
	 2. To document actual emissions of the air contaminants listed in Table 2 above, the Permittee shall monitor the following for each boiler: a. boiler run time in hours; and b. boiler fuel consumption rate (scf of gas and gallons of oil). The Permittee shall install flow meters on the boilers to measure the gas and oil consumption rates. 				
3-7	3. The Permittee shall construct the microturbines so as to accommodate the emissions testing requirements as stipulated in 40 CFR Part 60, Appendix A. The two outlet sampling ports (90 degrees apart from each other) for each EU must be located at a minimum of one duct diameter upstream and two duct diameters downstream of any flow disturbance.				
	4. In the event that any one of EU3 through EU7 is rebuilt or replaced, the Permittee shall conduct subsequent performance testing as detailed in Table 3 in order to verify continued compliance with the Table 2 emission limits, and shall submit the emission test protocol and emission test report as detailed in Table 3, Conditions 12 and 13.				
	5. The Permittee shall monitor the total combined biogas consumption of each unit, the power production of each unit, and the run time of each unit, to document compliance with the emission limits in Table 2.				

	Table 3			
EU	Monitoring and Testing Requirements			
3-7	6. Upon written notice from MassDEP, the Permittee shall conduct a noise survey in accordance with MassDEP guidelines and any requirements as noted within said notice, to demonstrate that the noise impacts from the operation of these EU's are in compliance with Regulation 310 CMR 7.10 and the Bureau of Waste Prevention's Noise Policy No. 90-001.			
8	 7. To document actual emissions of the air contaminants listed in Table 2 above, the Permittee shall monitor the following: a. flare run time in hours; and b. biogas consumption rate of the flare (scf). The Permittee shall install a flow meter on the flare to measure the biogas consumption rate. 			
3-7 and 8	8. The Permittee shall monitor the methane content (%) and heat content (Btu) of the biogas on a monthly basis.			
9	9. To document actual emissions of the air contaminants listed in Table 2 above, the Permittee shall monitor the following:a. Usage of ink and thinner; andb. VOC and HAP content of ink and thinner.			
Facility- wide	10. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.			
	11. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.			
	12. At least 30 days prior to emission testing, the Permittee shall submit to MassDEP for approval a stack emission pretest protocol.			
	13. Within 60 days after emission testing, the Permittee shall submit to MassDEP a final stack emission test results report.			

Table 3 Key:

EU = Emission Unit Number

CMR = Code of Massachusetts Regulations VOC = Volatile Organic Compounds scf = standard cubic feet

USEPA = United States Environmental Protection

CFR = Code of Federal Regulations HAP = Hazardous Air Pollutants

% = percent

	Table 4
EU	Record Keeping Requirements
1 and 2	The Permittee shall keep records of oil analysis results and vendor-supplied documentation and receipts used to demonstrate compliance with fuel oil sulfur content requirements.
	 2. To document actual emissions of the air contaminants listed in Table 2 above, the Permittee shall record, for each boiler, the monthly and twelve month rolling: a. boiler run time in hours; b. natural gas consumption (scf); and c. fuel oil consumption (gallons).
3-7	 To document actual emissions of the air contaminants listed in Table 2 above, the Permittee shall record, for each microturbine, the monthly and twelve month rolling: a. microturbine run time in hours; b. power produced by the microturbine (kilowatt-hours); and c. biogas consumption (scf). The Permittee shall maintain on-site the most recent results of stack testing that was performed on the microturbines.
8	5. The Permittee shall record the monthly and twelve month rolling: a. flare run time in hours; b. biogas consumption (scf); and c. any instances of alarm due to the absence of the flame while biogas was being routed to it.
3-7 and 8	6. The Permittee shall maintain records of the percent methane and BTU content of the biogas, and shall correct emission values as necessary for the BTU content of the biogas.
1-9	7. The Permittee shall maintain a record keeping system established on-site to include compliance records sufficient to document the actual monthly and twelve month rolling emission rates of NO _x , CO, VOC, PM, SO ₂ , and HAP so as to determine compliance status with the emission limitations contained in Table 2 above.
Facility- wide	8. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping .
	9. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	10. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.
	11. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.

	Table 4			
EU	Record Keeping Requirements			
Facility- wide	12. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.			
	13. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.			
	14. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.			
	15. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.			

Table 4 Key:

EU = Emission Unit Number

CO = Carbon Monoxide

PM = Total Particulate Matter, condensable and non-

condensable

CMR = Code of Massachusetts Regulations

scf = Standard cubic feet

SOMP = Standard Operating and Maintenance

Procedure

 $NO_x = Nitrogen Oxides$ $SO_2 = Sulfur Dioxide$

USEPA = United States Environmental Protection

Agency

Btu = British thermal units

VOC = Volatile Organic Compounds

	Table 5				
EU	Reporting Requirements				
Facility- wide	1.	The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).			
	2.	The Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by telephone: 508-767-2845, email: CERO.Air@massmail.state.ma.us and Roseanna.Stanley@state.ma.us , or fax: 508-792-7621, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).			

Table 5			
EU	Reporting Requirements		
Facility- wide	3. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. Pursuant to 7.12(3)(a)2., the Permittee shall report detailed emission estimates for all criteria and hazardous pollutants emitted at the Facility.		

Table 5 Key:

EU = Emission Unit Number CMR = Code of Massachusetts Regulations BAW = Bureau of Air and Waste

4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

Table 6					
EU	Special Terms and Conditions				
1 and 2	1. In accordance with 40 CFR Part 63, Subpart JJJJJJ, §63.11194(e), if the facility intends to burn No. 2 fuel oil in either boiler, the boiler would become an oil-fired boiler subject to all applicable subpart 6J requirements at the time it no longer meets the subpart 6J definition of "gas-fired boiler." Section 63.11225(g) requires notification of such a change within 30 days of the change and section 63.11210(h) requires that compliance must be demonstrated within 180 days of the change. [See 40 CFR § 63.11225(g) and § 63.11210(h)]. Since MassDEP has not accepted delegation of Subpart JJJJJJ for the subject boilers, the Permittee is advised to consult with the USEPA for additional information.				
3-7	2. The Permittee shall operate only one (1) microturbine, at any given time, at less than 45 kw (69.2% load) and at no time will any microturbine be operated at less than 35 kw (53.8% load).				
	3. The Permittee shall ensure that each microturbine has its own separate exhaust stack.				
	4. The Permittee shall develop a SOMP for the microturbines operation and maintenance. The SOMP shall include operating procedures for periods of start-up and shut-down. The Permittee shall maintain the SOMP onsite.				
	5. The Permittee shall operate the microturbines in a manner consistent with the SOMP and the conditions/parameters established during compliance testing.				

	Table 6				
EU	Special Terms and Conditions				
9	6. The Permittee shall employ best management practices to minimize VOC and HAP emissions from the Video-Jet printers. The Permittee shall keep any containers containing VOC and HAP materials tightly covered as much as practical during use and at all times when not being used. The Permittee shall take all reasonable steps to prevent spills by instituting proper material handling techniques and good housekeeping practices.				
	7. The Permittee shall not exceed 7,300 hours per year per unit in accordance with the operational limit detailed in Table 2 for this EU.				
	8. The Permittee shall not operate more than ten (10) Video-Jet printers at a single time.				
Facility- wide	9. This Plan Approval Transmittal No. X271683 supersedes Plan Approval No. 4B90165, Plan Approval Transmittal No. X235453, and Plan Approval Transmittal No. X228429 in their entirety, with the exception that all plan application materials submitted as part of the Plan Approvals become part of this Plan Approval, Transmittal No. X271638.				

Table 6 Key:

EU = Emission Unit Number HAP = Hazardous Air Pollutant USEPA = United States Environmental Protection Agency VOC = Volatile Organic Compounds CFR = Code of Federal Regulations

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as "shanty caps" and "egg beaters."
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7					
EU	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions Inches	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)	
1 and 2 (Note 1)	64	24	12-35	365	
3-7 (Note 1)	26.5	10	16-32	275	
8	32	48	0.75-1.2	1,000-1,800	

Table 7 Key:

EU = Emission Unit Number

°F = Degree Fahrenheit

Table 7 Notes:

Note 1: Each EU shall have its own separate stack.

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local laws or regulations now or in the future.

- F. The Application is incorporated into this Plan Approval by reference. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) and a completed <u>Adjudicatory Hearing Fee</u> Transmittal Form, a copy of which is attached hereto, must be mailed to:

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Commonwealth of Massachusetts Department of Environmental Protection P.O. Box 4062 Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Paul Dwiggins by telephone at 508-767-2760, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Roseanna E. Stanley Permit Chief Bureau of Air and Waste

Enclosures:

- Adjudicatory Hearing Fee Transmittal Form
- Stamped Plan Application

ecc: Franklin Board of Health Franklin Fire Department MassDEP/Boston - Yi Tian AMEC